

# THE BURDEN OF ARMAMENTS

by

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## INTRODUCTION

ONE of the first tasks confronting the General Disarmament Conference when it convenes in Geneva on February 2, 1932 will be the examination of data relating to the existing land, naval and air armaments of the sixty or more countries which are expected to participate. Full information is a necessary prelude to any scheme of limitation or reduction, for concrete proposals must be based upon accepted figures of existing armaments. With a view to providing the Conference with the most complete information, the Council of the League of Nations, at its meeting in January 1931, adopted a resolution requesting the Secretary-General to secure particulars from the various governments "with regard to the position of their armaments and all data, technical or otherwise, which might help to inform the Conference. . ." In accordance with this resolution, the Secretary-General on February 17 sent to the sixty-three governments invited to the Conference identical notes requesting them to forward the desired information as soon as possible. By October 15 the replies of twenty-five governments, including those of most of the larger states, had been made public, and a number of others had been received by the League Secretariat.

The technical information supplied by the governments is far from complete in every respect, but it presents the most recent armament figures and affords a more complete picture of the existing strength of the principal land, naval and air forces than has been available hitherto. The value of the returns,

moreover, is increased by the fact that the information furnished by the governments is supplied, in most cases, on a uniform model. Although the Preparatory Commission was not able to reach unanimous agreement on a plan for limitation of armaments, it incorporated in the Draft Treaty a series of model tables, to be filled in by the governments subscribing to the Treaty and to be used for the exchange of information.<sup>2</sup> A majority of the governments which have responded to the League's request for information have utilized the forms laid down in the Draft Convention.

As a basis for estimating existing military strength, however, the model tables must still be regarded as inadequate. They include three major elements of military strength (which are likewise the basis of the system of limitation laid down in the Draft Treaty), as follows:

1. The number of peace-time effectives serving in the land, sea and air forces.
2. The material of sea and air forces (i.e., the number and tonnage of war vessels and the number and horsepower of aircraft).
3. The total expenditure on land, sea and air forces, and the expenditure on the material for land and sea armaments.

These elements do not take into account the number of trained reserves available in time of war to countries with the conscript system, nor do they include the material of land warfare—such as guns, tanks, or ammunition—in service or in reserve.<sup>2</sup> Reserves and material constitute two of the most important factors in the strength of modern ar-

1. League of Nations, *Official Journal*, Minutes of the Sixty-second Session of the Council, p. 222.

2. For a summary of the provisions of the Draft Treaty, cf. W. T. Stone, "The Draft Treaty for the World Disarmament Conference," F. P. A. *Information Service*, Vol. VI, No. 25, February 18, 1931.

mies. Trained reserves form the backbone of conscript armies and permit rapid expansion from a peace to a war basis. Peace-time effectives afford no criterion for estimating the number of men or organized units available in time of war.<sup>4</sup> Stocks of arms and munitions and the new instruments of land warfare have become increasingly important in an era of mechanized armies. Armament statistics which do not reveal the size of reserve forces or divulge the nature or quantity of weapons and munitions scarcely afford a sound basis for estimating "existing strength."

Existing statistics are unsatisfactory in many other respects. Due largely to the differences in the various countries in organization, methods of recruiting and training, and distribution of forces, the official information submitted does not provide a scientific basis for comparing the armed strength of one country with that of another. In the case of land armaments, for example, a professional army of 100,000 men, recruited by voluntary enlistment and serving for a long term of years, is not identical with

a conscript army of 100,000 men serving a short term and then passing into the reserve. In the case of military expenditures, comparisons between countries may be even more misleading because of the sharp difference in standards of living, purchasing power of monetary units, fluctuations in currency, and variation in budgetary practices.<sup>5</sup> For these and other reasons, it is essential to avoid misleading comparisons and unsound conclusions based on insufficient evidence. Nevertheless, the Preparatory Disarmament Commission and similar agencies have frequently advocated the widest possible publicity with respect to the armaments of all countries. In the following pages an effort has been made to condense the mass of statistical information furnished by the governments and to compare the scale of present-day armaments with that existing before the World War. While it may not be possible to draw final conclusions or to show the precise situation in 1913 and 1930, at least the general trend in land, naval and air armaments and in the expenditure of the principal powers for national defense can be indicated.

### PRE-WAR AND POST-WAR LAND ARMAMENTS

Competition in armaments is a phenomenon of modern times. The intense rivalry in building up permanent military and naval establishments did not begin in earnest until about the middle of the nineteenth century. It was unknown in the Middle Ages. From the twelfth to the eighteenth centuries large standing armies were seldom maintained in times of peace but were raised by kings and princes, usually on short notice, for the conduct of a war. Troops were recruited by resort to the tribal levy or by hiring mercenaries—experienced campaigners who sold their services to the highest bidder.

Not until the birth of modern nationalism

<sup>3.</sup> The failure of the Draft Treaty to limit directly these important elements of military strength, or provide for exchange of information showing the number of reservists and the stocks of material, was sharply criticized by Germany and other governments and these objections were recorded in formal reservations in the report of the Preparatory Commission. Germany's objection was due in large measure to the fact that under the Versailles Treaty its conscript system was abolished and all reserve forces prohibited; moreover, the number of guns and the amount of ammunition permitted Germany was strictly limited. Headed by France, the principal countries which maintain the conscript system declared that limitation of trained reserves or direct limitation of the material of land armaments was impracticable, and declined to approve exchange of information with regard to these elements.

<sup>4.</sup> Cf. p. 361.

did permanent national armies appear in Europe. In the French Revolution a national army was raised by systematic and unsparing conscription—almost the first example of a national army raised to fight for a national cause. But the conscript system did not survive the Napoleonic wars, and for the next fifty years most European countries developed long-term professional—now national—armies. Prussia, however, after the defeat at Jena in 1806, developed a new type of organization which was destined to change completely the nature of military preparations and even the character of war. Prevented by Napoleon from keeping a large standing army, Prussia turned to universal conscription.<sup>6</sup> Under the new

<sup>5.</sup> It is for this reason that the Preparatory Disarmament Commission, in approving the principle of budgetary limitation, emphasized the fact that the expenditures of one country were not to be compared with those of another country, but only with the expenditures of the same country in successive years. Cf. Stone, "The Draft Treaty for the World Disarmament Conference," cited, p. 481.

<sup>6.</sup> By the Treaty of Paris of 1808, Prussia was obliged to limit its armed forces to 42,000 men. (Heinrich von Treitschke, *History of Germany in the Nineteenth Century*, translated by Eden and Cedar Paul: New York, McBride, Nast & Company, 1915, Vol. I, p. 345).

organization, known as the Krümper system, all able-bodied men were passed through the army as rapidly as possible, thus creating a large and efficient reserve force capable of rapid-mobilization in emergency. The effectiveness of this short-term compulsory military system was finally demonstrated in the overwhelming victories of the Prussian army in 1866 and 1870, and following the Franco-Prussian war all the European powers began rebuilding their military machines on the German model.

The effect of this new system was to increase greatly the number of trained units available on short notice and to bring very close to realization the new concept of the "nation in arms." In 1812 Napoleon's *Grande Armée*, with which he invaded Russia, numbered 450,000—the largest army he ever commanded in the field.<sup>7</sup> In 1870, however, Germany was able to mobilize more than 1,000,000 men and to complete the deployment of more than 400,000 on the French frontier in sixteen days.

#### CONTINENTAL ARMIES IN 1914

By 1914 the army organization of all the European powers had proceeded to a point where the initial mobilization put into organized units far larger numbers of men than had been possible in 1870. On the eve of the World War the peace-time strength of the German army was approximately 791,000 men. The initial mobilization, requiring fifteen days, placed in organized units 3,822,000 officers and men, and called up 1,200,000 trained reservists for incorporation in new units, bringing the mobilized war strength of the army to 5,000,000—more than six times the size of the peace-time establishment. On completion of mobilization, the German field army, excluding fortress troops, numbered 2,147,000.<sup>8</sup>

The peace-time strength of the French army in 1914 was approximately 790,000 men. Initial mobilization, completed in just over two weeks, brought the army to full war strength—approximately 3,580,000. This figure included all men liable to be called up under the initial mobilization law,

7. This army was composed of Prussian, Austrian, Saxon, Swedish and Polish troops, as well as French, and was raised by levies in the territories under Napoleon's control. (Adolf von Horsetzky, *A Short History of the Chief Campaigns in Europe Since 1782*, London, John Murray, 1909, p. 171.)

8. Germany, Reichsarchiv, *Der Weltkrieg, 1914-1918* (Berlin, 1925), Vol. I, p. 88.

and is more comparable to the total German figure of 5,000,000 men than to the smaller number in organized units. The French field army totalled approximately 1,800,000 officers and men.<sup>9</sup>

Comparable Austrian and Russian figures are not available. The peace-time strength of the Austrian army in 1914 was approximately 450,000 officers and men. The initial mobilization brought the army to its full war strength of approximately 3,350,000, but this figure included the older reserve classes (men from 33 to 42 years of age) and others unfit for active duty. On completion of mobilization the organized field army numbered 1,421,250.<sup>10</sup> The Russian mobilization theoretically brought the army to its full war strength of over 6,000,000 officers and men (from a peace strength of 1,200,000), but the actual number mobilized fell short of this figure and a large number of trained reserves were not placed in organized units.<sup>11</sup>

These figures illustrate not only the defectiveness of comparative statistics, but also the futility of using peace-time strength as a basis for estimating the size of conscript armies. Thus, while the following table does not show the precise relations between the powers in 1914, it does emphasize the tremendous increase in man power achieved by mobilization:

Country	Peace-Time Strength	Mobilized War Strength
Germany .....	791,000	5,000,000
Austria-Hungary .....	450,000	3,350,000
France .....	790,000	3,580,000
Russia .....	1,200,000	6,000,000

#### CONTINENTAL ARMIES IN 1930

No accurate comparison can be made between the principal conscript armies in 1914 and 1930, as virtually no government has disclosed the size of its actual reserve forces today or the number of units it would be able to place in the field upon mobilization. Estimates based upon the laws of the larger European countries would indicate that the number of reserves has been kept very nearly at pre-war levels. Actually, however, a

9. France, Ministère de la Guerre, *Les Armées Françaises dans la Grande Guerre* (Paris, 1922), Vol. I, p. 32.

10. Austria, *Oesterreich-Ungarns letzter Krieg; 1914-1918* (Vienna, 1931), Vol. I, p. 80.

11. The French Official War History estimates the total Russian war strength at 5,350,000, while the German War History places the figure at 6,000,000 and the organized strength at 4,800,000. The Russian field army, according to the German War History, was 3,420,000. These figures are estimates and are not based on reports of actual mobilization.

number of countries have been forced for financial reasons to reduce the number of conscripts called up annually for service with the active army, and also to retire conscripts to the reserve before the expiration of their period of service. In the case of France, the number of men available for service with the home defense and the mobile forces has been nearly 300,000 a year since the war; the number called up has varied from year to year, but probably has averaged over 200,000.<sup>12</sup> If colonial troops are included, the total is increased by from 80,000 to 90,000.<sup>13</sup> Since the World War, therefore, it is probable that at least 3,000,000 men have been trained with the active army, and placed in the first-line reserve. The older classes and second-line reserves provide an additional reserve of considerably more than 1,000,000 men.

In Italy, the total number of conscripts called up each year for service with the active army has ranged between 224,000 and 250,000—about 100,000 less than the total number available.<sup>14</sup> Theoretically, Italy has built up a reserve force of some 2,500,000 trained men, although the actual number on the lists today has not been made public. Of the new European countries, Poland has called up from 150,000 to 190,000 conscripts each year since the war, which would place the present strength of the reserve force at approximately 1,700,000 trained men.<sup>15</sup> As in the case of other countries, the actual figure may be somewhat smaller. Czechoslovakia has called up approximately 100,000 men a year in recent years, thus placing the present strength of the reserve forces in the neighborhood of 1,000,000 men.<sup>16</sup>

The only Continental countries which have not retained the conscript system are Germany, Austria, Hungary and Bulgaria, which were forced, under the terms of the Treaties of Peace, to abolish compulsory service.<sup>17</sup> All the states created since the war have adopted conscription, and built up considerable bodies of trained reserves.

12. For the number of men fit for service with the colors in 1928, cf. League of Nations, *Armaments Year-Book, 1930-1931*, p. 442.

13. Cf. League of Nations, *Particulars Concerning the Position of the Armaments of the Different Countries* (hereinafter cited as *Particulars Concerning Armaments*), No. 3, France, C.440.M.187.1931.IX. [Annex].

14. *Ibid.*, No. 10, Italy, C.557.M.227.1931.IX.

15. *Ibid.*, No. 13, Poland, C.643.M.257.1931.IX.

16. *Ibid.*, No. 17, Czechoslovakia, C.654.M.266.1931.IX.

#### Post-War Organization

The post-war organization of European armies, however, differs from the pre-war organization in several important respects. While the initial period of service with the active army has been reduced by a number of countries, the size of the *cadre* of professional officers and noncommissioned officers has been increased. Whereas in 1914 the average period of conscript service was from three to four years, it is now from twelve months to two years.<sup>18</sup> France has reduced the period of service from three years (1914) to one year (1928), and Italy from two years to eighteen months. Poland requires from eighteen months to two years with the colors; Yugoslavia, from nine to eighteen months; Czechoslovakia, from fourteen to eighteen months. This reduction in the period of service has decreased the size of the active peace-time establishment, but has not materially affected the number of men passed into the reserve. Instead of passing to the reserve with three or four years' experience in the active army, conscripts are now retired after a year or eighteen months.

To offset the decrease in efficiency resulting from the shorter period of service, France and some other countries have built up a large professional force of officers, noncommissioned officers and men. In France, provision was made for the reorganization of the army during 1929 and 1930. The law on the General Organization of the Army, adopted March 31, 1928, made reduction of the initial period of service from eighteen months to one year contingent upon the recruiting of sufficient professional soldiers to raise this category from 72,000 to 106,000 (including 30,000 in the Colonial Army).<sup>19</sup> While in point of numbers this professional force is larger than the entire German army permitted under the Versailles Treaty, it should be noted that in France the professional soldiers are not grouped together in a regular army, but are distributed among all the units and services of the national army.

17. Cf. David Woodward, "Limitation of Land Armaments," F. P. A. Information Service, Vol. VI, No. 2, April 2, 1930.

18. Cf. Appendix, Table I.

19. This figure includes officers and noncommissioned officers. The law also provided for an increase in the strength of the Mobile Republican Guards to 15,000 and increases in the number of civil employees and "military officials." Cf. League of Nations, *Armaments Year-Book, 1929-1930*, p. 420.

Nevertheless, the professional soldiers form a *cadre* of experienced officers and men which may be used for the organization of new units in time of war. While few have gone as far as France in building up a professional army, most countries with the conscript system maintain a relatively large number of professional officers and noncommissioned officers. Poland, with a total of 265,000 effectives in 1930, maintains 17,000 officers and 34,585 noncommissioned officers—a total professional force of more than 51,000.<sup>20</sup>

Without detailed information showing the size and organization of reserve forces in 1930, the only remaining basis for comparison of pre-war and post-war armies is the number of peace-time effectives. Even here the figures are deceptive. In most cases the pre-war figures are based on the number of men authorized by law and not on the number serving with the active army, while the post-war figures may be based (1) on the number of men provided for in the budget, (2) on the number authorized by law, or (3) on the "average daily number of effectives"<sup>21</sup>—the formula in the Draft Disarmament Treaty. Obviously, only a very rough comparison may be made on this basis.

The peace-time strength of the land armed forces of the eighteen principal European powers in 1913 (excluding Russia) was approximately 3,000,000 men. In 1930 the peace-time effectives of the same countries were 2,378,000 men. This apparent reduction is largely offset by the armies of the six European states created by the Peace Treaties—Poland, Czechoslovakia, Latvia, Lithuania, Finland and Estonia—with a combined strength in 1930 of 487,000. Including these countries, the total peace-time effectives of the European powers in 1930 was approximately 2,865,000 officers and men. This slight decrease from the 1913 total is more than accounted for by the reduction in armaments which was imposed upon Germany, Austria, Hungary and Bulgaria. In 1930 the total number of effectives in these latter countries was 189,000 men, as compared with 1,301,000 in 1930—a reduction of 1,112,000. Apart from the reductions im-

posed upon Germany and the successors of the former Central Powers, it would appear, therefore, that the total peace-time forces of the other European countries were considerably larger in 1930 than in 1913.<sup>21a</sup>

Russia has not been included in this calculation because comparable figures are not readily available. The 1913 estimate of 1,200,000 effectives was probably larger than the actual peace-time strength of the Czar's army at the outbreak of the war. Moreover, the entire military system has been reorganized by the Soviet Union. The peace-time strength of the Red army of the U.S.S.R. in 1929 was approximately 562,000 officers and men—less than half the reported size of the Imperial army in 1913.

#### LAND FORCES OF GREAT BRITAIN AND THE DOMINIONS

Apart from Continental Europe, the chief powers with world-wide interests are the members of the British Commonwealth of Nations, the United States and Japan. Of these, the United States and Great Britain, with their traditional aversion to compulsory military service, have long maintained in peace time small professional armies recruited by voluntary enlistment.<sup>22</sup> The strength of the British regular army in 1913 was approximately 174,000 officers and men, excluding the British Army in India but including regular troops stationed overseas; in 1930 the average daily number of effectives was 144,000 officers and men. None of the British Dominions maintains a permanent professional army. Before the World War the land forces of the Dominions consisted of voluntary militias trained for a few days each year under a small staff of permanent officers, and the numbers were so small as to be virtually negligible. Canada, for example, maintained approximately 3,500 permanent officers in 1913 and approximately the same number in 1930. In 1913, 6,800 British troops were stationed in South Africa—while in 1930 the number had been reduced to 1,400. In India, British policy has insisted upon a relatively large permanent army, composed of British and Indian troops. In 1913 the Indian army consisted of 75,000 British and 150,000 Indian troops,

<sup>20</sup> League of Nations, *Particulars Concerning Armaments*, No. 13, Poland, cit'd.

<sup>21</sup> For explanation of "average daily effectives," cf. Table III.

<sup>21a</sup> Cf. Appendix, Table II.

<sup>22</sup> During the World War both countries resorted to the draft and raised huge citizen armies which were sent to France.

officered almost entirely by the British. In 1930 the number of British troops had been reduced to 60,000, while Indian troops had been increased to 162,000.<sup>23</sup>

#### THE UNITED STATES ARMY

Before the World War the military policy of the United States was based upon the maintenance of a small regular army, to be augmented in an emergency by volunteer forces organized, equipped and trained after the outbreak of war. In 1913 the total personnel of the Regular Army was 92,035, including 4,655 officers.<sup>24</sup> During a period of 18 months, between April 1917 and November 1918, the United States raised a force of nearly 4,000,000 men and transported more than 2,000,000 overseas.<sup>25</sup> On June 4, 1920 Congress amended the National Defense Act of June 3, 1916—which had departed from the earlier policy by providing for the federalization of state militia—to effect "the development and maintenance in time of peace of the framework of essential troop units to be raised in an emergency."<sup>26</sup> The Act, as amended, provided that the United States army should consist of the Regular Army, the National Guard (when in the service of the United States), and the Organized Reserves, including the Officers' Reserve Corps and the Enlisted Reserve Corps. While the National Defense Act authorized a legal strength of 17,728 officers and 280,000 enlisted men for the Regular Army, the actual strength never has been maintained. In 1930 the total personnel of the army was 139,957, including 13,080 officers.<sup>27</sup> Of this number, 22,000 officers and men were stationed overseas in the Philippine Islands, the Panama Canal Zone and other insular possessions. The strength of the United States army in 1930 was approximately 60 per cent greater than it was in 1913.

While the National Guard is not subject to federal authority in times of peace, it is provided with various training facilities by the War Department and is available on the

declaration of an emergency by Congress. The recognized strength of the National Guard in 1930 was 169,785 officers and men.<sup>28</sup> The Organized Reserve is virtually a *cadre* of officers for the building of new units in time of war. Immediately after the World War the Officers' Reserve Corps was composed largely of World War veterans. These veterans are now passing from the list of those available for active duty, and their places are being taken by graduates of the Reserve Officers' Training Corps and the military training camps. Since 1920 the R.O.T.C. has theoretically furnished more than 40,000 officers to the reserve corps.<sup>29</sup>

#### JAPANESE AND CHINESE FORCES

The Japanese army was modelled on the pre-war German system, and consequently is based on compulsory military service. In 1913 the peace-time army was composed of approximately 250,000 officers and men. In 1930, computed on the basis of the model tables, the total peace-time strength was 259,000 officers and men. As the Japanese army was not mobilized during the World War, the full war strength in 1914 cannot be determined.

While large numbers of men are known to be under arms in China, that country has not been able to create an organized military establishment in recent years. No figures comparable with those of other powers can be given, and estimates of the number of men bearing arms range from one to three million.

With respect to the land armed forces of the world, it may be said that while the total number of peace-time effectives in 1930 is somewhat smaller than the peace-time effectives in 1913, the reduction is accounted for in large measure by the drastic limitations imposed upon Germany and the other states by the Peace Treaties. In organization and equipment the armies of the principal countries of the world have been maintained at levels as high as, if not higher than, those of 1913. Moreover, military aviation has introduced, since 1913, an entirely new factor and one of the utmost importance.<sup>30</sup>

23. Cf. T. A. Bisson, "The Military Problem in India," *Foreign Policy Reports*, Vol. VII, No. 16, October 14, 1931.

24. United States, *Report of the Secretary of War, 1914* (Washington, Government Printing Office, 1914), p. 143.

25. United States, *Report of the Secretary of War, 1930* (Washington, Government Printing Office, 1930), p. 82.

26. For an official summary of the National Defense Act of 1916, cf. United States, War Department, *Annual Reports, 1916* (Washington, Government Printing Office, 1916), p. 163-167; for the 1920 Act, cf. *Report of the Secretary of War, 1930*, p. 37.

27. League of Nations, *Particulars Concerning Armaments, Communication by the Government of the United States*, C.413.M.169.1931.IX.

28. League of Nations, *Armaments Year-Book, 1930-1931*, p. 925.

29. United States, *Report of the Secretary of War, 1930*, cited, p. 83.

30. Cf. Appendix, Table VI.

## AIR ARMAMENTS

Many new instruments of warfare have been developed during the last twenty years, but none has produced a greater change in the character of modern armies than the adaptation of aircraft to military purposes.<sup>33</sup> At the outbreak of the World War, airplanes were still in the experimental stage and few military men in any country believed that air forces would play a decisive part in the conduct of war for many years. The larger European countries had just begun to organize small experimental aviation units and to open schools for the training of pilots. In the United States, Congress made no provision for military aviation until 1914, when an aeronautic section under the Army Signal Corps was authorized, with a personnel not to exceed 60 officers and 260 enlisted men. The actual strength of the aviation unit in 1914, however, was 24 officers and 115 enlisted men.<sup>34</sup> Since the World War, the importance of this new factor has steadily increased until today, in equipment and trained personnel, the air forces of the great powers are incomparably stronger than they were at the end of 1918. In practically every important country the number of airplanes and pilots has steadily increased. In France, for

example, the total number of airplanes has virtually doubled during the past eight years.<sup>35</sup> In 1923 France had 1,542 airplanes, including spare machines in units; whereas in 1930, the number had increased to 2,375, not including spare machines or those in "immediate reserve." Poland in 1923 had a total of 126 fighting planes and an air force personnel of 1,700 officers and men, as compared with 700 airplanes and 7,919 officers and men in 1930.<sup>36</sup> In 1923 Japan had a total of 548 machines with a personnel of 5,711 officers and men, as compared with 1,639 machines and 16,821 officers and men in 1930.<sup>37</sup>

Data relating to the existing strength of the principal air armed forces is summarized in Table VI of the Appendix. The information furnished by the governments, however, is inadequate in many respects. While the governments have reported the total number of airplanes of the land, sea and air forces and the total personnel, very few have indicated the different types of machines in service or shown the total number in reserve. The figures are sufficient, however, to indicate the extent to which air forces have been developed in recent years.

## NAVAL ARMAMENTS

Naval armaments are more readily comparable than land armaments, both because they are limited to a relatively small number of maritime powers and because the characteristics of war vessels and fighting fleets are more or less similar. The growth of modern navies began when wooden sailing ships gave way to steam-driven ironclads; intensive competition did not set in, however, until the closing decades of the nineteenth century and reached its highest peak between 1900 and 1914, when Germany challenged England's historic supremacy on the seas. During these fourteen years the eight great naval powers laid down no less than 1,709 new war vessels, with a total dis-

<sup>31</sup>. It is not possible to trace the development of military aviation in this report. For a more complete discussion of this factor, cf. David Woodward, "Limitation of Air Armaments," F. P. A. Information Service, Vol. VI, No. 17, October 29, 1930.

<sup>32</sup>. United States, *Report of the Secretary of War, 1914*, cited, p. 517.

placement of 5,653,000 tons.<sup>38</sup> On July 1, 1914 the relative size of these eight powers, based upon total tonnage of combatant ships built and building, was as follows:<sup>39</sup>

Great Britain .....	2,714,106
Germany .....	1,306,577
France .....	899,915
United States .....	894,889
Japan .....	699,916
Russia .....	678,818
Italy .....	497,815
Austria-Hungary .....	347,508

<sup>33</sup>. League of Nations, "Statistical Enquiry into National Armaments," *Peace-Time Military, Naval and Air Forces, 1923*, A.20.1923.IX; also League of Nations, *Particulars Concerning Armaments*, No. 3, France, C.440.M.187.1931.IX.

<sup>34</sup>. League of Nations, "Statistical Enquiry into National Armaments," cited, p. 54; also League of Nations, *Particulars Concerning Armaments*, No. 13, cited.

<sup>35</sup>. League of Nations, "Statistical Enquiry into National Armaments," cited, p. 41; also League of Nations, *Particulars Concerning Armaments*, No. 11, Japan, C.558.M.228.1931.IX.

<sup>36</sup>. A. G. Enoch, *The Problem of Armaments* (New York, The Macmillan Company, 1923), p. 174-176.

<sup>37</sup>. United States, *Navy Year Book, 1914*, Senate Document, 367, 63d. Congress, 3d. Session (Washington, Government Printing Office, 1914), p. 850.

During the World War the relative naval strength of the leading sea powers was completely changed by emergency building programs on the one hand, and by losses sustained by the belligerents on the other. The ratios were further affected by the Treaties of Peace, which virtually eliminated Germany and Austria as naval powers. The most significant development during these years was the unprecedented rise of the United States to a position of naval power second only to that of Great Britain, and the equally unprecedented rise of Japan in the Pacific. In the summer of 1916 the United States Congress passed a building program, the largest single project ever adopted by any nation, which called for construction of no less than 157 war vessels within a period of three years, at a cost estimated at \$650,000,000—a sum larger than that spent on ship construction by the United States in the preceding 20 years. Following the entry of the United States into the war, this program was supplemented by additional construction of small surface vessels to cope with the German submarine menace. The change wrought by the war and the building activities of the United States and Japan was shown on November 1, 1919, one year after the Armistice, when the relative tonnage of the powers, including ships built and building, was as follows:<sup>38</sup>

	<i>In Tons</i>
Great Britain .....	2,829,661
United States .....	2,067,478
Japan .....	980,426
France .....	799,873
Italy .....	434,727
Germany .....	116,886*
Austria† .....	.....
Russia** .....	.....

\*Tonnage retained under provisions of the Versailles Treaty.  
†All Austro-Hungarian warships were surrendered to the Allied and Associated Powers under Article 136 of the Treaty of St. Germain-en-Laye.

\*\*As a result of the Revolution, naval figures for Russia are not available for 1919.

#### NAVAL CONFERENCES SINCE THE WORLD WAR

Since 1920 three international conferences have met for the purpose of limiting naval armaments. Two of these conferences have resulted in treaties under which the principal naval powers voluntarily accepted certain measures of limitation. At the Wash-

38. United States, *Report of the Secretary of Navy for 1919* (Washington, Government Printing Office, 1920), p. 255.

ington Conference of 1921-1922, the five leading powers agreed to limit capital ships and aircraft carriers, and at the London Naval Conference of 1930 Great Britain, the United States and Japan reached an agreement limiting all classes of naval vessels, and fixing maximum tonnage levels not to be exceeded by these powers by December 31, 1936. As the results of the Washington and the London Treaties have been reviewed at length in previous issues of these reports, no attempt is made to retrace the history of post-war naval developments, or to examine the policies of the several powers.<sup>39</sup> It may be pointed out in passing, however, that while the building of new capital ships was arrested by the Washington Treaty, competition in auxiliary vessels—cruisers, destroyers and submarines—continued among all the powers between 1922 and 1930. The maximum tonnage levels permitted under the London Treaty were as follows:

	<i>United States</i>	<i>Great Britain</i>	<i>Japan</i>
Capital ships .....	462,400	474,750	266,750
Aircraft carriers ....	150,000	150,000	81,000
Cruisers			
With guns of more than 6.1-in. calibre	180,000	146,800	108,400
With guns of 6.1-in. calibre or less .....	143,500	192,200	100,450
Destroyers .....	150,000	150,000	105,000
Submarines .....	52,700	52,700	52,700
	<hr/>	<hr/>	<hr/>
Total .....	1,138,600	1,166,450	714,300

France and Italy were unable to reach an accord at the London Conference, and did not accept any limitation of auxiliary vessels.

#### NAVAL STRENGTH IN 1931

The relative strengths in 1931 of the five powers in different categories of ships is shown in Table IV of the Appendix. According to the returns submitted by the governments in response to the request of the League of Nations, the total tonnage of the five powers in 1931 was as follows:

United States .....	1,251,840
Great Britain .....	1,250,247
Japan .....	850,328
France .....	628,603
Italy .....	403,905

39. "Disarmament and the Five Naval Powers," F. P. A. *Information Service*, Vol. III, No. 2, March 30, 1927; "The International Naval Situation," *ibid.*, Vol. III, No. 21-22, January 6, 1928; W. T. Stone, "The London Naval Conference," *ibid.*, Vol. VI, No. 8, May 28, 1930.

These figures, however, include a number of over-age vessels and vessels listed for disposal. In the case of the United States, the combined tonnage of over-age cruisers, destroyers and submarines, and those listed for disposal is 77,850 tons. The British returns include 3,920 tons listed for disposal, and one vessel of 1,475 tons lost at sea. Table IV does not indicate the amount of construction required if the United States, Great Britain and Japan were to build up to the maximum levels permitted under the London Treaty by the end of 1936, due to the fact that the number of ships which may be built to replace vessels becoming "over-age" by December 31, 1936 is not shown. Practically

all the present American destroyers, built during and immediately after the World War, and a large number of submarines, will be technically "over-age" before the end of 1936. None of the present cruiser tonnage of the United States will be over 20 years old, however, whereas a large number of British cruisers will have reached this age limit by 1936.

If the present tonnage of the five naval powers is compared with the tonnage in 1914, it will be seen that the American and Japanese fleets have been increased materially, while those of Great Britain, France and Italy have been reduced.

## ARMAMENT EXPENDITURES

The scale of modern armaments and the broad changes which have taken place in the military, naval and air forces of the principal powers since 1914 are recorded more graphically and probably more accurately in terms of expenditure than in personnel or material. While it is impossible to make a direct comparison in terms of expenditure between the armaments of one country and those of another, a cogent comparison can be made of defense expenditures from one year to another in the same country. Such a comparison shows clearly the growth of armaments during the pre-war period of unrestricted competition, as well as the changes which have taken place since the World War.

In 1858, according to a compilation made in 1928 by Jacobsson, the total national defense expenditures of all the European powers was approximately \$460,000,000.<sup>42</sup> In 1913 the nations were spending approximately \$2,531,000,000 upon armaments, more than five times the outlay in 1858. This increase, Jacobsson points out, is even greater if the fall in prices between the two dates is taken into account. Moreover, during the five years preceding the World War the rate of increase was accelerated. "From 1908 to 1913 the armaments expenditure of Europe rose by more than 50 per cent."<sup>43</sup>

<sup>41.</sup> Per Jacobsson, "Armaments Expenditure of the World," reprinted from *The Economist* (London, 1928), p. 8.

Estimates of the present total annual world expenditure upon armaments range between four and five billion dollars and vary according to whether pensions, special war charges, civil expenditures, and other similar items are included in the military and naval budgets. On the basis of the particulars relating to military, naval and air expenditures supplied by the governments at the request of the League Council and the current estimates published in *Armaments Year-Book, 1930-1931*, the total armament expenditure of 57 countries is approximately \$4,500,000,000.<sup>44</sup>

## NATIONAL DEFENSE EXPENDITURES BY THE SEVEN GREAT POWERS

Approximately two-thirds of the total world armaments expenditure in 1930, however, is accounted for by the seven great powers—Great Britain, France, Germany, Italy, Soviet Russia, Japan and the United States—and in the case of these powers a more or less accurate comparison may be made between 1913 and 1930. Table X presents the expenditures of these powers for national defense in 1913 and the corresponding expenditures between the years 1926 and 1930. Under national defense, the pre-war and post-war figures include all expenditures upon the army and navy—even

<sup>42.</sup> *Ibid.*, p. 9. During the same period, 1908 to 1913, the defense expenditure of the United States increased approximately 13 per cent.

<sup>43.</sup> The average rate of exchange for 1930, as computed in the U. S. *Federal Reserve Bulletin* (January 1931), has been used in converting into American dollars the expenditures of the different countries.

if borne by a Ministry of Colonies or some other ministry—and, in some cases, the cost of ordinary military pensions. In no case, however, do they include war pensions.<sup>44</sup>

On the basis of these figures the total national defense expenditure of the seven great powers in terms of United States currency was \$2,154,000,000 in 1913, as compared with \$2,958,800,000 in 1930, an increase of approximately 37 per cent over the amount spent in 1913. This increase is the more remarkable when it is considered that the expenditure on national defense by Germany in 1930 was approximately 63 per cent below the figure for 1913. Excluding Germany,

the national defense expenditure of the other six powers was \$1,690,700,000 in 1913, and \$2,788,400,000 in 1930—an increase of approximately 65 per cent over 1913. In some measure this apparent increase in national defense expenditure is due to the general rise in price levels since 1913. Nevertheless, the average of the price levels in these six countries was not more than 26 per cent higher in 1930 than in 1913.<sup>45</sup>

The following table shows the national defense expenditure of the seven great powers in 1913 and 1930, with the percentage of increase or decrease and the index of wholesale prices:

	(In millions of dollars)		Percentage of Increase or Decrease	Index of Wholesale Prices: 1913=100
	1913	1930		
Great Britain .....	375.1	535.0	+ 42	116
France .....	348.7	455.3	+ 30	105
Italy .....	179.1	258.9	+ 44	100
Japan .....	95.5	232.1	+142	131
Russia .....	447.7	579.4*	+ 30	185
United States .....	244.6	727.7	+197	118
Total .....	1,690.7	2,788.4	+ 65	.....
Germany .....	463.3	170.4	- 63	122
Total .....	2,154.0	2,958.8	+ 37	.....

\*1929.

#### NATIONAL BUDGETS AND EXPENDITURES FOR DEFENSE

The proportion of the total national budgets of the great powers expended upon national defense indicates the relatively large financial burden imposed by modern armaments. Great Britain, on the basis of the budget estimates for the fiscal year 1930-1931, applied approximately 13.8 per cent of its total budget to the upkeep of the army, navy and air forces, including ordinary pensions. The French budget for 1930-1931 applies 21.9 per cent of its total expenditure to the three military branches, not including pensions. The United States, on the basis of appropriations for the same fiscal year, devoted approximately 16.5 per cent of its total budget to the army and navy.<sup>46</sup>

These percentage figures, however, do not necessarily reflect the true burden upon the

taxpayers of different countries, as the national budget of one government may include many services performed by local and provincial authorities in another country. Comparisons with 1913 figures are likewise meaningless, because the national budgets of all the great powers have been greatly increased by interest and sinking-fund charges on huge national debts contracted to pay for the World War. These annual debt charges, together with war pensions and veterans' compensation, may legitimately be added to current defense expenditures to show the proportion of the total budget attributable to past wars and military preparations. Approximately 69 per cent of the French budget for 1930-1931 (on the basis of estimates) was applied to pensions, debt service and the army, navy and air forces. Approximately 65 per cent of the British budget for the same year was used for these purposes. Sixty per cent of the United States budget for 1930-1931 was attributable to past wars and military and naval preparations.

The national defense expenditures of the great powers are not only greater today

44. In the case of France the post-war figures include various small charges resulting from the war and from internal obligations.

45. These figures are based upon the index of wholesale prices in 1930 as given for the different countries in the *Armaments Year-Book, 1930-1931*.

46. Cf. Appendix, Table XI.

than in 1913, but have increased sharply during the past five years. The seven powers included in Table X spent approximately \$2,958,800,000 on military, naval and air forces in 1930-1931, as compared with \$2,276,000,000 in 1926-1927—an increase of 30 per cent during the five-year period. During this period, moreover, the average level of prices in all the countries declined. The only government to show a reduction in defense expenditures was Great Britain, which spent £116,000,000 in 1926-1927, as compared with £110,000,000 in 1930-1931. Defense expenditures in France were virtually doubled between 1926-1927 and 1930-1931, increasing from 6,478 million francs to 11,674 million francs.<sup>47</sup> In the United States, defense expenditures increased from \$591,000,000 in 1926-1927 to approximately \$727,000,000 in 1930-1931. Relatively smaller increases were recorded by Italy, Japan, Soviet Russia and Germany.<sup>48</sup>

#### EXPLANATION OF INCREASES IN EXPENDITURE SINCE 1926

What has caused these increases since 1926? In the case of France, the abnormally sharp increase in the cost of the armed forces is explained in part by the fact that following stabilization of the franc in 1926, salaries in all government services were raised to compensate employees for the higher cost of living after the war and during the inflation period. But salary adjustments do not account for the entire increase. While costs of food and forage declined between 1926 and 1930, expenditures for the air force, fortifications, stocks of arms, ammunition and other material for the land armed forces and for new naval construction increased from 30 to more than 100 per cent. Thus, 235 million francs were spent on construction and new material for the army in 1927-1928, as compared with 517 million francs in 1930-1931.<sup>49</sup> On new works and supplies of war material for the navy, 821 million francs were spent in 1926-1927, as compared with 1,489 million in 1930-1931. The army and navy air forces were com-

bined in a unified service under an Air Ministry in 1928, so that accurate comparisons cannot be made between 1926 and 1930. Between 1929 and 1930-1931, however, the total expenditures of the Air Ministry increased from 1,317 million to 2,018 million francs. There are other indications in the budgets for these years that France, like other countries, has been steadily increasing expenditure on material, and particularly on the equipment of its air force.

In the case of the United States, whose defense expenditure has likewise increased sharply, aviation and new construction for the navy account for relatively large amounts. Appropriations for naval aviation increased from \$22,000,000 in 1926-1927 to approximately \$30,000,000 in 1930-1931; Army Air Corps appropriations increased from \$19,000,000 to \$31,000,000 in 1930-1931; new construction for the navy increased from approximately \$36,000,000 in 1927-1928 to more than \$59,000,000 in 1930-1931.<sup>50</sup>

The actual expenditure upon land, naval and air forces and the proportion of total defense budgets expended under the most important categories—such as effectives, transports, buildings and war material—is brought out more clearly in the particulars supplied by the governments for the Disarmament Conference, than in the various national budgets. In furnishing these particulars, a number of governments utilized the model tables recommended by the Committee of Experts on Budgetary Questions.<sup>51</sup> These model tables are intended "to show the armaments expenditure, in a simple and comprehensive form, in order to allow the governments . . . and public opinion to realize more clearly the significance of this expenditure than would be possible from a direct study of the various national accounts with all their diversity of structure." The Experts' Committee, therefore, tried to adapt the model tables to the actual systems

47. Budget estimates reported in *Armaments Year-Book, 1930-1931*; actual expenditures reported in League of Nations, *Particulars Concerning Armaments*, cited, were 13,809 million francs. Cf. Appendix, Table X.

48. Cf. Appendix, Table X.

49. *Armaments Year-Book, 1930-1931*, cited, p. 459-471.

50. *Armaments Year-Book, 1930-1931*, cited, p. 943-947.  
 51. The Committee of Experts on Budgetary Questions was originally constituted in November 1926, chiefly with a view to drawing up a model statement of expenditure on national defense. At the final session of the Preparatory Commission, in November-December 1930, a number of questions relating to budgetary limitation were referred to the Committee of Experts which, after holding two sessions in December 1930 and February 1931, issued a report containing specific recommendations and a series of model tables. Cf., League of Nations, *Preparatory Commission for the Disarmament Conference, Report of the Committee of Experts on Budgetary Questions*, C.182.M.69.1931.IX.

of budget accounting existing in the greatest possible number of countries, and to provide a certain measure of uniformity.

Perhaps the most interesting information revealed by the expenditure statements is the proportion of the military budgets used for the purchase or manufacture of war material. In the case of land forces, the model tables include under this head arms, ammunition and fighting material, engineer and other warlike stores, and manufacture of war material in state establishments. According to the particulars furnished by the governments for 1930, France and Great Britain each devoted 18 per cent of the total expenditure of their land forces to war material, while the United States and Italy devoted 17 per cent. In the case of war material for the navies, which includes new construction and maintenance, as well as arms, ammunition and fighting material, France devoted 62 per cent of the total naval budget to material, Great Britain 46 per cent, the United States 45 per cent and Italy 59 per cent. Under the head of air material, which includes arms, ammunition and fighting material, the proportion of the total air budgets of these four powers was as follows: France, 58 per cent; Great Britain, 41 per cent; the United States, 54 per cent; and

Italy, 46 per cent. The increasing importance of military and naval aviation is shown by the proportion of the total national defense expenditure devoted to air forces. Eighteen per cent of Great Britain's total defense expenditure is allocated to the air forces, while 15 per cent of the total defense expenditure of France, the United States and Italy is devoted to military and naval aviation.

It has not been possible to include in this report the detailed expenditure figures supplied by the governments in conformity with the model tables. The total expenditure for the land, naval and air forces of the seven great powers, however, is given in Table X in the Appendix. It will be noted that these figures do not correspond with the figures for 1930-1931 compiled from the *Armaments Year-Book* and summarized in Table IX. The differences in the two sets of figures are accounted for by the fact that, in accordance with the recommendations of the Committee of Experts, the particulars furnished by the governments do not include pensions of any kind, whether ordinary or war pensions; that they represent, in most cases, actual expenditures and not credits voted by the Parliaments; and that they represent gross rather than net expenditure.

## CONCLUSION

In conclusion it is necessary to re-emphasize the inadequacy of existing information regarding armaments. Despite the fact that the League Covenant obliges members of the League to "exchange full and frank information as to the scale of their armaments,"<sup>52</sup> that other governments, including the United States, have formally supported the principle of complete publicity, most of the important military powers have failed to make public essential details of their armed strength, particularly those which relate to stocks of war material and organized reserve strength. The Draft Disarmament Treaty, moreover, does not require governments to furnish this information. Virtually the only means of checking purchases of arms and ammunition is by reference to the military budgets of the different governments. The budget figures do not reveal, however, the

stocks of material held in reserve, although they indicate that most of the great powers have increased the amount spent upon warlike weapons in recent years. Since the World War, moreover, the larger states have concentrated attention upon the organization of essential industrial resources with a view to rapid conversion of factories from a peace-time to a war footing. Detailed plans for the procurement of war materials have been worked out by the governments of all the more important countries and, in some cases, contracts have been entered into between the governments and key industries.<sup>53</sup> Without full information on these important elements the figures showing the personnel of peace-time forces and even military expenditure are incomplete.

52. Article 8.

53. For the policy of the United States government, cf. "Hearings Before the War Policies Commission," appointed under the authority of Public Resolution No. 99, 71st Congress, 2nd session, p. 351. Washington, 1931.

## A: LAND ARMED FORCES

TABLE I

## Chief Characteristics of the Principal Armies of the World

(Compiled from League of Nations, *Armaments Year-Book, 1930-31*.)

Country	Type of Army	System of Recruiting	Active Service With Colors <sup>1</sup>	Total Liability to Service in Years	First Line Reserve: Years
Albania .....	Conscript	Comp. Service	18 months	31	24 1/2
Argentina .....	"	"	1 year	25	.....
Austria .....	Professional	Vol. Enlistment	12 years	....	.....
Belgium .....	Conscript	Comp. Service	8-14 months	25	.....
Bolivia .....	"	"	1 mo.-2 years	30	4
Brazil .....	Prof. & Conscript	Vol. Enlistment <sup>2</sup>	1-2 years	....	.....
British Empire .....					
Great Britain .....	Professional	Vol. Enlistment	2-8 years	....	.....
Australia .....	Vol. Militia	Vol. Enlistment <sup>3</sup>	12 days	....	.....
Canada .....	" "	Vol. Enlistment <sup>3</sup>	30 "	....	.....
India .....	Professional	Vol. Enlistment	2-7 years	....	8-10
Irish Free State .....	"	"	12 "	....	6-8
New Zealand .....	Militia	Vol. Enlistment <sup>3</sup>	3-10 days	35	.....
U. of S. Africa .....	"	Vol. Enlistment <sup>3</sup>	10-16 days	43	.....
Bulgaria .....	Professional	Vol. Enlistment	12 years	....	.....
Chile .....	Conscript	Comp. Service	1 1/2 years	25	9
Colombia .....	"	"	3 years	24	.....
Costa Rica .....	"	"	1 year	42	.....
Cuba .....	Professional	Vol. Enlistment <sup>3</sup>	2 years	....	.....
Czechoslovakia .....	Conscript	Comp. Service	14-18 months	30	18-20
Denmark .....	Militia	" "	2-5 "	16	.....
Dominican Rep. .....	Constabulary	.....	.....	....	.....
Ecuador .....	Conscript	Comp. Service	3 years	30	14
Egypt .....	"	"	.....	....	.....
Estonia .....	"	"	1 year	35	4
Finland .....	"	"	12-15 months	35	7
France .....	"	"	1 year	28	16
Germany .....	Professional	Vol. Enlistment	12 years	....	.....
Greece .....	Conscript	Comp. Service	4-18 months	30	18
Guatemala .....	"	"	1-2 years	....	.....
Haiti .....	Constabulary	Vol. Enlistment	1 year	....	.....
Honduras .....	Conscript	Comp. Service	.....	19	.....
Hungary .....	Professional	Vol. Enlistment	12 years	....	.....
Italy .....	Conscript	Comp. Service	18 months	34	.....
Japan .....	"	"	5 mo.-2 years	20	5 1/3
Jugoslavia .....	"	"	9-18 months	29	.....
Latvia .....	"	"	12-15 "	29	18
Liberia .....	Militia	Vol. Enlistment	.....	....	.....
Lithuania .....	Conscript	Comp. Service	18 months	23 1/2	.....
Mexico .....	Professional	Vol. Enlistment	3 years	....	.....
Netherlands .....	Conscript	Comp. Service	4-15 months	21	.....
Nicaragua .....	Constabulary	Vol. Enlistment	.....	....	.....
Norway .....	Comp. Militia	Comp. Service	48-102 days	35	.....
Paraguay .....	Conscript	" "	2 years	28	9
Persia .....	"	"	2 "	25	4
Peru .....	"	"	2 "	....	.....
Poland .....	"	"	18-24 months	29	17 1/2
Portugal .....	"	"	15 "	25	16
Rumania .....	"	"	2 years	29	3
Russia .....	"	"	1 1/2-2 years	21	.....
Salvador .....	"	.....	.....	....	.....
Siam .....	"	Comp. Service	2 years	25	7
Spain .....	"	"	2 mos.-2 years	18	6
Sweden .....	Conscript	" "	140-200 days	22	.....
Switzerland .....	Militia	" "	45-105 "	28	.....
Turkey .....	Conscript	" "	6 mos.-2 years	25	.....
United States .....	Professional	Vol. Enlistment	1-3 years	....	.....
Uruguay .....	"	Vol. Enlistment <sup>3</sup>	.....	....	.....
Venezuela .....	Conscript	Comp. Service	.....	....	.....

1. Some of the periods are subject to various modifications.

2. Compulsory if voluntary enlistments not sufficient.

3. Compulsory in case of war.

The figures in Table II (p. 372) are based on peace-time effectives serving in the land armed forces in 1913 and 1930. The figures for the various countries are not strictly comparable because of fundamental differences in organization and in methods of recruiting. In general, three types of armies are represented: (1) professional armies, (2) conscript armies, and (3) militia forces.

Professional armies, such as those of the United States and Great Britain, are recruited by voluntary enlistment for a relatively long period. The number of effectives represent the full enlisted strength of the regular army.

Conscript armies are composed of a permanent staff of officers and non-commissioned officers, and, in addition, enlisted men called up, under the laws governing military service, to serve with the active army. The pre-war figures are based upon the number of conscripts and professional officers provided for in the national laws effective at that time as given in the *Statesman's Year-Book*. In many cases the number of men with the active army was smaller than the number provided by law. The post-war figures for conscript

armies are based on the number of professional officers and conscripts provided by existing laws as given in the *Armaments Year-Book, 1930-31*, or the average daily number of effectives as given in the official returns submitted by the governments at the request of the League of Nations.

Militia forces are recruited both by voluntary enlistment, as in the case of Canada and Australia, and by compulsory service, as in the case of Switzerland and Norway. In the case of militia recruited by voluntary enlistment, the figures given show only the effectives in the permanent corps of officers maintained to train volunteers a certain number of days each year. In the case of countries with compulsory service, the number of men serving with the active army is given unless otherwise indicated.

## A: LAND ARMED FORCES

TABLE II

## Peace-Time Effectives of the Land Armed Forces of the World—1913 and 1930

Country	Type of Army	Year	Effectives	Year	Effectives
Albania .....	Conscript	.....	.....	1930-31	13,466
Argentina .....	"	1913	24,000	1930	27,484
Austria-Hungary .....	"	1913	450,000	.....	.....
Austria .....	Professional	.....	.....	1931	21,463*
Belgium .....	Conscript	1913	53,600	1931	86,384*
Bolivia .....	"	1913	3,000	1930	8,000
Brazil .....	Prof. & Conscript	1913	23,500	1931	50,805
British Empire					
Grt. Britain & N. Ireland ..	Professional	1913	174,000	1931	144,522*
Australia .....	Vol. Militia	1913	2,662	1930-31	1,638
Canada .....	" "	1913	3,520	1930	5,214*
India					
British Troops .....	Professional	1913	75,857	1929-30	60,215
Indian Troops .....	"	1913	150,000	1929-30	162,751
Irish Free State .....	"	.....	.....	1930-31	6,440
New Zealand .....	Militia	.....	.....	1930-31	561
Union of South Africa					
British Troops .....	"	1913	6,800	1930	1,424
Native Troops .....	"	1913	.....	1930	150,000
Bulgaria .....	Conscript	1913	59,900	1930-31	22,331
Chile .....	"	1913	20,000	1927	22,380
Colombia .....	"	1913	7,000	1929-30	8,769
Costa Rica .....	"	1913	.....	1929	500
Cuba .....	Professional	1913	11,105	1930-31	12,458
Czechoslovakia .....	Conscript	.....	.....	1930	138,788*
Denmark .....	Militia	1913	10,600	1930-31	8,093*
Dominican Republic .....	Constabulary	.....	.....	1929	2,128
Ecuador .....	Conscript	1913	7,810	1930	5,323
Egypt .....	"	.....	.....	1930-31	12,485
El Salvador .....	"	.....	.....	1930-31	3,000
Estonia .....	"	.....	.....	1930	18,533*
Finland .....	"	.....	.....	1931	31,575*
France .....	"	1913	790,000	1930	651,320*
Germany .....	"	1913	791,000	.....	100,500*
Greece .....	"	1913	29,000	1930-31	61,684
Guatemala .....	"	.....	.....	1930-31	6,649
Haiti .....	Constabulary	1913	5,000	1929	2,770
Honduras .....	Conscript	.....	.....	1925-26	2,253
Hungary .....	Professional	.....	.....	1930-31	34,993
Italy .....	Conscript	1913	304,672	1928-29	491,398*
Japan .....	"	1913	250,000	1930-31	259,304*
Jugoslavia (Serbia) .....	"	1913	51,000	1930-31	184,448*
Latvia .....	"	.....	.....	1929	23,000*
Lithuania .....	"	.....	.....	1931	17,839
Mexico .....	Professional	1913	29,533	1930	64,203
Netherlands .....	Conscript	1913	22,955	1930-31	55,376*
Nicaragua .....	Constabulary	1913	4,000	1923-24	1,800
Norway .....	Comp. Militia	1913	10,564	1930	5,731
Paraguay .....	Conscript	1913	2,600	1927-28	2,915
Persia .....	"	.....	.....	1930	40,000
Peru .....	"	1913	6,500	1930	9,045
Poland .....	"	.....	.....	1930-31	265,980*
Portugal .....	"	1913	32,800	1929-30	61,143*
Rumania .....	"	1912	104,460	1929	240,501*
Russia .....	"	1913	1,200,000	1929	562,000
Siam .....	"	.....	.....	1929	25,000
Spain .....	"	1913	122,000	1929-30	195,393*
Sweden .....	"	1913	25,475	1930-31	24,869*
Switzerland .....	Militia	1913	4,000	1930-31	4,519
Turkey .....	Conscript	1913	230,000	1929	140,000
United States .....	Professional	1913	92,035	1930-31	139,957*†
Uruguay .....	Conscript	1913	10,400	1930	7,314
Venezuela .....	"	1913	9,000	1929	6,000

\*"Average daily effectives," as reported in League of Nations, *Particulars Concerning Armaments*, cited.  
†Includes Army Air Corps.

## A: LAND ARMED FORCES

TABLE III

## Average Daily Number of Effectives Reached During the Year in Land Armed Forces\*

Country	Year	A.		B.		C.	
		Land Armed Forces Stationed in the Home Country in this table	Total effectives, including those specified separately	Land Armed Forces Stationed Overseas in this table	Total effectives, including those specified separately	Total Land Armed Forces Officers	Total effectives, including those specified separately
Belgium .....	1930	68,920	4,820	17,464	205	86,384 <sup>1</sup>	5,025
Czechoslovakia	1930	138,788	10,221	.....	.....	138,788	10,221
France .....	1931	402,255	24,618	249,065	8,952	651,320 <sup>2</sup>	33,570
Germany .....	1930	100,500	4,500	.....	.....	100,500	4,500
Great Britain..	1929-30	114,745	7,861	29,777	1,532	144,522 <sup>3</sup>	9,393
Italy .....	1930-31	462,281	21,174	29,137	963	491,398 <sup>4</sup>	22,137
Japan .....	1930	259,304	17,343	.....	.....	259,304	17,343
Jugoslavia ....	1930	184,448	6,741	.....	.....	184,448	6,741
Netherlands ..	1930	16,293	1,568	39,083	1,130	55,376	2,698
Poland .....	1930	265,980	17,895	.....	.....	265,980	17,895
Rumania .....	1931	240,501	14,185	.....	.....	240,501 <sup>5</sup>	14,185
Spain .....	1930	141,893	21,893	53,500	2,100	195,393 <sup>6</sup>	23,993
Sweden .....	1929-30	24,869	2,340	.....	.....	24,869	2,340
United States..	1930	117,937	11,822	22,020	1,258	139,957 <sup>7</sup>	13,080

\*The definition of "average daily effectives" agreed upon in the Draft Disarmament Treaty was intended to lay down clearly and beyond question that the limitation of the personnel of the land, naval and air forces applies only to the officers and men in service, and not to those in the reserve forces. The average daily effectives are reckoned by dividing the total number of days' duty performed each year by the number of days in the year. In the case of reservists called up for special training, however, the average daily number, reckoned in this way, is included with the average of the active army.

1. *Belgium:* Theoretical effectives provided for by existing legislation. The actual numbers in 1930 were 66,300 effectives and 4,000 officers.
2. *France:* Theoretical effectives provided for by existing legislation. Actual number not given.
3. *Great Britain:* Includes average daily effectives in the regular army, supplementary reserves, territorial army and officers, training corps, regular army stationed overseas and colonial militia, but not British troops in Indian Army.
4. *Italy:* Theoretical effectives provided for by existing legislation. Actual number: 414,858 serving with the colors for 5 months; 250,890 serving with the colors for 7 months.
5. *Rumania:* Theoretical effectives provided for by existing legislation. Actual number not given.
6. *Spain:* As a result of the reorganization of army carried out by the Government of the Republic from May to July 1931, the number of officers and men has been materially reduced.
7. *United States:* Includes the personnel of the Army Air Corps, listed separately under air forces. Does not include the National Guard. During 1930 the members of the National Guard were given certain training in armories and camps, which, when computed under Article 3 of the Draft Convention, amounts to 10,774 average daily effectives.

## B: NAVAL ARMAMENTS

TABLE IV

## Warships Built and Building by Principal Powers—1930-1931

(Compiled from League of Nations, *Particulars Concerning Armaments*, cited.)

## UNITED STATES

	Built No.	Built Tons	Building No.	Building Tons
Capital Ships .....	18 <sup>1</sup>	523,800	....	.....
Aircraft Carriers .....	3	77,500	1	13,800
Cruisers .....				
Guns more than 6.1 in.	8 <sup>3</sup>	79,400	13 <sup>2</sup>	127,400
Guns 6.1 in. and less ..	11 <sup>4</sup>	75,900	....	.....
Destroyers .....	256 <sup>5</sup>	273,360	....	.....
Submarines .....	107 <sup>7</sup>	76,880	3 <sup>6</sup>	3,800

1. One listed for training ship.
2. Four appropriated for or authorized but not yet laid down.
3. Three over 20 years of age, 2 of which are listed for disposal.
4. One over 20 years of age.
5. Includes 23 Coast Guard vessels, 29 destroyers over 16 years of age, 11 on disposal list.
6. Two appropriated for.

## GREAT BRITAIN

	Built No.	Built Tons	Building No.	Building Tons
Capital Ships .....	18 <sup>8</sup>	555,050	....	.....
Aircraft Carriers .....	6	115,350	....	.....
Cruisers .....				
Guns more than 6.1 in.	16	155,286	1	8,400
Guns 6.1 in. and less ..	36 <sup>9</sup>	170,665	....	.....
Destroyers .....	143	155,550	21	28,820
Submarines .....	57 <sup>10</sup>	55,301	7	5,825

7. Forty listed for disposal, and 17 over 13 years of age.
8. Three listed for disposal, one paid off; preparing for trials and for sale.
9. Four building or authorized; one paid off; preparing for sale.
10. One lost at sea since date for which the data in this table are given.

## JAPAN

	Built No.	Built Tons	Building No.	Building Tons
Capital Ships .....	10	298,400	....	.....
Aircraft Carriers .....	3	61,270	1	7,600
Cruisers .....				
Guns more than 6.1 in.	10 <sup>11</sup>	84,120	4	40,000
Guns 6.1 in. and less ..	20 <sup>12</sup>	93,375	4 <sup>13</sup>	34,000
Destroyers .....	99 <sup>15</sup>	111,885	20 <sup>14</sup>	30,136
Submarines .....	67	70,973	13 <sup>16</sup>	18,569

11. Includes 2 vessels over 20 years of age.
12. Includes 3 vessels appropriated for.
13. Includes one vessel over 20 years of age.
14. Eleven of these appropriated for.
15. Includes 2 vessels over 16 years of age.
16. Eight appropriated for.

## FRANCE

	Built No.	Built Tons	Built No.	Built Tons
Capital Ships .....	9 <sup>17</sup>	185,925	....	.....
Aircraft Carriers .....	1	22,146	....	.....
Cruisers .....				
Guns more than 6.1 in.	10	104,424	2	20,000
Guns 6.1 in. and less ..	10	58,641	1	5,886
Destroyers .....	17	38,662	14	34,942
Submarines .....	79	68,593	31	29,282
Torpedo Boats .....	61	60,102	....	.....

17. Includes 3 over-age capital ships not subject to the Washington rules.

## ITALY

	Built No.	Built Tons	Built No.	Built Tons
Capital Ships .....	4	87,917	....	.....
Cruisers .....				
Guns more than 6.1 in.	8	74,820	3	30,480
Guns 6.1 in. and less ..	9	33,045	6	32,378
Destroyers .....	74	75,953	12	15,748
Submarines .....	46	35,094	29	18,470

TABLE V

## Average Daily Number of Effectives Reached During the Year in Naval Forces\*

Country	Year	Total effectives, including those specified separately in this table	Officers
France .....	1931	58,833 <sup>1</sup>	4,384
Germany .....	1930	15,000	1,500
Great Britain ..	1929-30	96,042 <sup>2</sup>	8,390
Italy .....	1930-31	51,326 <sup>3</sup>	3,296
Japan .....	1930	88,199 <sup>4</sup>	.....
Netherlands ....	1930	8,613	695
Poland .....	1930	3,108	275
Rumania .....	1931	5,513	326
Spain .....	1930	19,176 <sup>5</sup>	2,355
Sweden .....	1929-30	7,838	543
United States ..	1930	109,886 <sup>6</sup>	10,420

\*Average daily effectives have been computed by dividing the total number of days of service performed by the number of days in the year.

1. Theoretical effectives calculated on the basis of existing legislation; does not include personnel of Naval Air Force under the control of the Air Ministry.

2. Includes the Royal Marine Corps, but not the personnel of the Naval Air Force.

3. Does not include the personnel of the naval air forces.

4. Includes 9,877 effectives employed in naval aviation.

5. Includes air force cadets.

6. Includes 18,530 effectives of the Marine Corps, and the personnel of the Naval Air Force, which is listed separately under Air Armed Forces.

## C: AIR ARMAMENTS

**TABLE VI**  
**Airplanes of the Land, Sea and Air Armed Forces**

<i>Country</i>	<i>Total Number</i>	<i>Total Horsepower</i>	<i>Notes</i>
Belgium	195	85,600	
Czechoslovakia	546	263,069	Does not include 141 airplanes for instruction purposes.
France	2,375	1,225,123	Includes 1,210 machines capable of use in war in service in tactical units, and 637 in training schools or formations in the home country, but not those in "immediate reserve." Includes 439 machines in service in tactical units or training schools overseas, but not those in "immediate reserve"; and 89 machines carried on board ships, but not spare machines.
			Airplanes in "immediate reserve," not listed in total; includes 474 with tactical units or training schools in the home country and 131 overseas.
Great Britain	1,434	740,215	Includes all aircraft in commission or "immediate reserve" as follows: 706 machines in operational units, 247 in training and miscellaneous units, 481 in "immediate reserve." These are distributed as follows: 848 machines in home country, 286 overseas and 300 in aircraft carriers.
Italy	1,507	876,847	Includes all machines suitable for use in war, both in commission and "immediate reserve" with tactical units, on ships and in training schools.
Japan	1,639	.....	Includes machines in service and "immediate reserve," distributed as follows: 838 (excluding school machines) in the army air service, 472 in the Coastal Flying Corps (exclusive of those for training and experimental purposes) and 329 carried by aircraft carriers and other warships.
Jugoslavia	627	293,291	Includes machines in commission in present organic units. Does not include 263 training aircraft in commission with land forces, 34 training seaplanes in commission with naval forces, or a certain number of machines under construction with the land and naval forces.
Netherlands	321	122,530	Includes 210 machines in tactical units, 48 in immediate reserve, 61 for training purposes and 2 ambulance machines.
Poland	700	262,290	Includes machines in service, with tactical units and training schools.
Rumania	799	264,413	The number of airplanes of the land army also includes all kinds of training airplanes, together with airplanes on order and those undergoing trials.
Spain	533	276,870	Includes machines capable of use in war in commission and reserve: 500 with army air force (321 in commission, 45 in reserve in tactical units, 134 in training schools), 33 with Navy.
Sweden	167	51,430	Includes all airplanes of armed forces, 91 capable of use in war, 76 school airplanes not suitable for war purposes.
United States	1,752	1,028,745	Includes: Army, 965 tactical types in commission, including 435 at tactical stations, remainder at training and administrative establishments. Does not include 49 transport and 550 training airplanes on land which are not designed for military operations. Navy, 787 machines, including 375 in commission in tactical units and also airplanes that can be made ready for use within a short period of time, as well as military airplanes in operation for administrative, training and experimental purposes. Includes 164 airplanes in aircraft carriers.

## C: AIR ARMAMENTS

TABLE VII

**Average Daily Number of Effectives  
Reached During the Year in the Air  
Armed Forces\***

Country	Year	Total effectives, including those specified separately in this table	Officers	
			.....	.....
Belgium .....	1930	2,840	.....	.....
Czechoslovakia	1930	6,482	.....	.....
France .....	1931	42,554 <sup>1</sup>	.....	.....
Great Britain ..	1929-30	30,118 <sup>2</sup>	3,800	.....
Italy .....	1930-31	22,193 <sup>3</sup>	.....	.....
Japan .....	1930	16,821 <sup>4</sup>	.....	.....
Netherlands ....	1930	1,497	.....	.....
Poland .....	1930	7,919	.....	.....
Rumania .....	1931	11,836 <sup>5</sup>	.....	.....
Spain .....	1930	3,469	1,920	.....
Sweden .....	1929-30	991	.....	.....
United States ..	1930	27,324 <sup>6</sup>	.....	.....

\*Average daily effectives have been computed by dividing the total number of days of service performed by the number of days in the year.

1. Theoretical effectives calculated on the basis of existing legislation: 33,560 effectives in home country, 8,518 overseas.

2. Includes 23,229 serving in home country, 6,889 overseas.

3. Includes 21,418 in home country, 775 overseas.

4. Divided between military air forces—6,944, and naval air forces—9,877.

5. Theoretical effectives calculated on the basis of existing legislation.

6. Includes 13,155 effectives in Army Air Corps and 14,169 in Naval Air Force. These figures are included in the total effectives of the United States Army and Navy listed in previous tables.

## D: EXPENDITURE

TABLE IX

**Expenditure Upon Land, Naval and Air Forces<sup>1</sup>**

Country	Year	Currency	Army	Navy	Total Expenditure	
					(In millions)	
Czechoslovakia ....	1930	Crowns	1,812.7	.....	.....	1,812.7
		U. S. Dollars	53.6	.....	.....	53.6
France .....	1930-31	Francs	8,655.7	3,013.9	2,139.8	13,809.5
		U. S. Dollars	339.3	118.1	83.8	541.3
Germany .....	1930-31	Marks	520.7	186.9	.....	707.7
		U. S. Dollars	123.9	44.5	.....	168.4
Great Britain ..	1929-30	Pounds	39.3	49.9	19.2	108.5
		U. S. Dollars	191.4	242.6	93.7	527.5
Italy .....	1930-31	Lire	3,892.3	1,478.8	957.8	6,328.9
		U. S. Dollars	203.9	77.4	50.1	331.6
Japan .....	1929-30	Yen	260.0*	267.6	.....	527.6
		U. S. Dollars	128.4	132.2	.....	260.6
Netherlands ....	1929	Florins	119.3	44.4	11.2	174.9
		U. S. Dollars	47.9	17.8	4.5	70.3
Poland .....	1931-32	Zlotys	785.3	34.2	78.0	847.6
		U. S. Dollars	82.3	3.8	8.7	94.9
Rumania .....	1931	R. Pounds	10.2	.4	1.8	12.4
		U. S. Dollars	50.0	2.1	8.8	61.1
Spain .....	1930	Pesetas	569.5	181.3	.....	750.8
		U. S. Dollars	66.6	21.2	.....	87.8
Sweden .....	1929-30	Krona	79.2	48.8	.....	128.0
		U. S. Dollars	21.2	13.0	.....	34.3
United States ....	1929-30	U. S. Dollars	324.9†	375.2‡	109.0**	700.2

1. The above figures, which were compiled from *Particulars Concerning Armaments*, cited, were prepared by the governments in accordance with the recommendations of the Committee of Experts on Budgetary Questions, and differ from previous figures published in the *Armaments Year-Book*. They eliminate all pension charges and certain non-military charges in the war budgets, but include all items in budgets of other departments which may be attributed to upkeep of the land, naval and air forces.

\*Contains various items of expenditure for military air forces.

†Includes expenditures on army air force.

‡Includes expenditures on naval air force.

\*\*Included also under Army and Navy.

## D: EXPENDITURE

TABLE VIII

## Per Capita Expenditure on Land, Naval and Air Forces

(Compiled from League of Nations, *Armaments Year-Book, 1930-31* and *Particulars Concerning Armaments*, cited.)

Country	Year	Total Defense Expenditure	Total in U. S. Dollars	Per Capita Expendi- ture in U. S. Dollars
Argentina .....	1930	114.1	Paper Pesos	94.9 8.48
Austria <sup>1</sup> .....	1930	103.6	Schillings	14.5 2.17
Belgium .....	1930	1,223.0	Belgian Francs	41.2 5.11
Bolivia <sup>2</sup> .....	1930	8.7	Bolivianos	3.1 1.05
Brazil <sup>2</sup> .....	1930	459.2	Paper Milreis	49.1 1.22
British Empire				
Grt. Britain & N. Ireland <sup>3</sup> .....	1930	108.5	Pounds Sterling	527.5 .11.48
Australia .....	1930-31	3.7	" "	17.7 2.76
Canada <sup>3</sup> .....	1930-31	19.2	Dollars	19.2 1.94
India <sup>2</sup> .....	1930	579.7	Rupees	208.6 .65
Irish Free State <sup>3</sup> .....	1930-31	1.1	Pounds Sterling	5.7 1.96
New Zealand .....	1930-31	.7	" "	3.4 2.35
Union of South Africa .....	1930-31	1.0	" "	4.9 .62
Bulgaria .....	1930-31	1,087.0	Levas	7.8 1.33
Chile .....	1930	241.0	Pesos	28.9 6.73
Colombia <sup>2</sup> .....	1930	6.4	Pesos	6.2 .78
Cuba .....	1930-31	12.0	Pesos	12.0 3.33
Costa Rica .....	1929-30	2.7	Colones	.6 1.36
Czechoslovakia <sup>3</sup> .....	1930	1,812.7	Crowns	53.6 3.45
Denmark .....	1930-31	44.9	Kroner	12.0 3.38
Dominican Republic .....	1931	1.1	Pesos	1.1 1.11
Ecuador .....	1930	9.0	Sucres	1.8 .91
Egypt .....	1930-31	2.1	Egyptian Pounds	10.5 .73
El Salvador <sup>2</sup> .....	1929-30	4.3	Colones	2.1 1.27
Estonia .....	1930-31	18.4	Krooni	4.9 4.41
Finland <sup>3</sup> .....	1931	639.4	F. Marks	16.0 4.59
France .....	1930-31	13,809.5	Francs	541.3 13.13
Germany .....	1930-31	715.3	Marks	170.4 2.70
Greece .....	1930-31	1,641.6	Drachmai	21.1 3.39
Guatemala .....	1929-30	2.4	Quetzal	2.4 1.14
Haiti .....	1929-30	5.7	Gourdes	.9 .46
Honduras .....	1930-31	1.9	Pesos	.9 1.14
Hungary .....	1930-31	101.1	Pengo	17.6 2.01
Italy <sup>3</sup> .....	1930-31	6,328.9	Lire	331.6 7.92
Japan <sup>3</sup> .....	1930-31	527.6	Yen	260.6 4.04
Jugoslavia <sup>3</sup> .....	1930-31	3,211.1	Dinar	56.5 4.71
Latvia .....	1930-31	39.3	Lats	7.5 3.99
Liberia .....	1928	.1	Dollars	.1 .005
Lithuania .....	1931	56.8	Lits	.5 .002
Mexico .....	1930	92.6	Pesos	43.6 2.73
Netherlands <sup>3</sup> .....	1930	174.9	Florin	70.3 8.21
Nicaragua .....	1928-29	.7	Cordobas	.7 .12
Norway .....	1930-31	47.5	Kroner	12.6 3.54
Persia .....	1929-30	98.7	Krans	11.8 1.31
Peru .....	1930	2.4	Peruvian Pounds	.9 .15
Poland <sup>3</sup> .....	1930-31	847.6	Zloty	94.9 3.07
Portugal <sup>3</sup> .....	1930-31	490.5	Escudos	22.0 3.54
Rumania <sup>3</sup> .....	1931	12,497.2	R. Pounds	61.1 3.43
Siam .....	1930-31	21.1	Baht	8.8 .92
Spain <sup>3</sup> .....	1930	750.8	Pesetas	87.8 3.82
Sweden <sup>3</sup> .....	1930-31	128.0	Krona	34.3 5.60
Switzerland .....	1931	98.3	Francs	18.9 4.64
Turkey .....	1929-30	69.2	Turkish Pounds	33.5 2.44
Union of S. S. Russia .....	1929-30	1,125.1	Roubles	579.4 3.58
United States <sup>3</sup> .....	1930	700.2	Dollars	700.2 6.84
Uruguay .....	1929-30	8.6	Pesos	8.5 4.60
Venezuela <sup>2</sup> .....	1930-31	30.4	Bolivars	5.7 1.88

1. Includes war charges and part of pensions.

2. Includes ordinary pensions.

3. Gross expenditure, excluding pensions; compiled from League of Nations, *Particulars Concerning Armaments*, cited.

## D: EXPENDITURE

## TABLE X

National Defense Expenditures, 1913, and 1926-27—1930-31  
(In millions of national currency)

Country	1913-1914	1926-27	1927-28	1928-29	1929-30	1930-31
		(Appropriations)				
Great Britain <sup>1</sup>	National Defense	Army .....	43.3	43.9	41.0	40.5
		Navy .....	57.3	58.3	57.2	51.7
		Air .....	15.4	15.1	16.2	17.8
Total (Pounds Sterling) .....	77.2	116.0	117.3	114.5	113.9	110.0
" (U. S. dollars) .....	375.1	564.0	570.3	556.7	553.6	535.0
Exchange rate .....	486	486.0	486.0	486.0	486.0	486.0
Index of wholesale prices ....	100.0	147.0	141.0	140.0	134.0	116.0
<hr/>						
1913-1914						
1926						
(Estimates)						
France <sup>a</sup>	National Defense	Ministry of War .....	4,296.4	8,441.0	6,254.5	6,278.5
		Ministry of Marine .....	1,433.0	2,221.2	2,438.4	2,722.7
		Air Ministry .....	.....	217.9	1,317.8	2,018.9
		Ministry of Colonies .....	269.5	481.0	478.7	539.9
		Army of Occupation .....	479.3	481.3	451.2	507.8
Total (Frances) .....	1,807.0	6,478.2	11,574.5	9,835.7	12,263.5	11,674.5
" (U. S. dollars) .....	348.7	210.5	451.4	383.5	478.2	455.3
Exchange rate .....	19.3	3.25	3.9	3.9	3.9	3.9
Index of wholesale prices ....	100.0	703.0	617.0	126.0	124.0	105.0
<hr/>						
1913-1914						
1926-27						
(Appropriations)						
Italy <sup>b</sup>	National Defense	Ministry of War .....	2,900.6	2,508.8	2,618.8	2,505.5
		Ministry of Marine .....	1,227.2	1,106.7	1,128.1	1,117.3
		Ministry of Aviation .....	719.7	612.1	686.1	639.4
		Ministry of Colonies .....	479.8	610.4	462.3	427.3
		Civil Mobilization .....	1.9	1.2	.8	.6
Total (Lire) .....	927.9	5,329.4	4,839.4	4,896.3	4,690.4	4,978.9
" (U. S. dollars) .....	179.1	207.8	251.6	243.9	243.9	258.9
Exchange rate .....	19.3	3.9	5.2	5.2	5.2	5.2
Index of wholesale prices ....	100.0	566.0	126.0	125.0	114.0	100.0
<hr/>						
1913-1914						
1926-27						
(Appropriations)						
Japan <sup>c</sup>	National Defense	Army Ordinary .....	167.5	174.1	167.6	178.8
		Extraordinary .....	29.3	43.9	81.4	48.3
		Total .....	196.9	218.1	249.1	227.2
		Navy Ordinary .....	127.4	136.5	143.0	147.6
		Extraordinary .....	109.8	136.9	125.1	120.0
		Total .....	237.3	273.5	268.1	267.6
<hr/>						

Total (Yen) .....	191.8	.....	434.2	491.6	517.2	494.9	473.7
" (U. S. dollars) .....	95.5	.....	212.0	240.9	253.4	242.5	232.1
Exchange rate .....	49.8	.....	49.0	49.0	55.4	66.8	49.0
Index of wholesale prices ...	100.0	.....	174.0	169.0	9.1	11.5	131.0
 <i>1918-1914</i>			 <i>1926-27</i>	 <i>1927-28</i>	 <i>1928-29</i>	 <i>1929-30</i>	 <i>1930-31</i>
Russia <sup>a</sup>	National Defense	Military and Naval Affairs .....	650.7	764.8	874.5	1,046.8	.....
		Special Forces .....	40.8	49.3	55.4	66.8	.....
		Escort Troops .....	6.5	7.6	9.1	11.5	.....
		Total .....	698.0	821.7	939.0	1,125.1	.....
		Special Account .....	6.7	9.5	12.9	Not available	.....
			 <i>704.7</i>	 <i>831.2</i>	 <i>951.9</i>	 <i>1,125.1</i>	 <i>.....</i>
Grand Total (Roubles) .....	869.5	.....	.....	.....	.....	.....	.....
" " (U. S. dollars) .....	447.7	.....	362.9	428.0	510.2	579.4	.....
Exchange rate .....	51.5	.....	51.5	51.5	51.5	51.5	.....
Index of wholesale prices ...	100.0	.....	174.0	172.0	179.0	185.0	.....
 <i>1913-1914</i>			 <i>1926-27</i>	 <i>1927-28</i>	 <i>1928-29</i>	 <i>1929-30</i>	 <i>1930-31</i>
Germany <sup>b</sup>	National Defense	Defense Department Ordinary Expenditure Extraordinary .....	617.3	645.5	757.8	883.2	710.2
			29.1	60.4	.....	.....	.....
		Total .....	646.5	705.9	767.8	883.2	710.2
		War Charges .....	11.5	7.2	11.2	7.7	6.1
			 <i>658.0</i>	 <i>713.2</i>	 <i>769.1</i>	 <i>890.9</i>	 <i>716.3</i>
Grand Total (Reichsmarks) .....	1,947.7	.....	.....	.....	.....	.....	.....
" " (U. S. dollars) .....	463.3	.....	156.6	169.7	182.0	164.4	170.4
Exchange rate .....	23.8	.....	23.8	23.8	23.8	23.8	23.8
Index of wholesale prices ...	100.0	.....	135.0	138.0	140.0	135.0	122.0
 <i>1913</i>			 <i>1926-27</i>	 <i>1927-28</i>	 <i>1928-29</i>	 <i>1929-30</i>	 <i>1930-31</i>
United States <sup>c</sup>	National Defense	Army .....	267.3	293.2	312.1	327.3	345.2
		Navy .....	324.2	332.2	366.1	375.4	382.5
			 <i>591.5</i>	 <i>625.7</i>	 <i>678.3</i>	 <i>702.8</i>	 <i>727.7</i>
Total .....	244.6	.....	139.0	139.0	140.0	134.0	118.0
Index of wholesale prices ...	100.0	.....	.....	.....	.....	.....	.....

1. For pre-war expenditure, cf. Great Britain, Parliamentary White Paper, Cmnd. 1685, London, May 15, 1922. Post-war expenditure compiled from League of Nations, *Armaments Year-Book, 1929-30, 1930-31*. Pre-war and post-war figures show net expenditure, including ordinary pensions and certain war charges shown in the budgets of the fighting services, but excluding World War pensions.

2. Pre-war figures from League of Nations, *Budget Expenditure on National Defense 1913 and 1920-22, A.31. (a)*. (Geneva, 1922). Post-war figures compiled from League of Nations, *Budget Expenditure on National Defense 1913 and 1929-30, 1930-31*. The latter includes various charges resulting from the World War and from internal obligations, but does not include either ordinary or war pensions.

3. Pre-war figures from League of Nations, *Budget Expenditure on National Defense 1913 and 1920-22*, cited. Post-war figures compiled from League of Nations, *Armaments Year-Book, 1929-30, 1930-31*, do not include ordinary or war pensions.

4. Pre-war figures from League of Nations, *Budget Expenditure on National Defense 1913 and 1920-22*, cited. Post-war figures compiled from League of Nations, *Armaments Year-Book, 1929-30, 1930-31*. Pensions included in above figures.

5. Pre-war figures from League of Nations, *Armaments Expenditure of the World, 1914*, cited. Post-war figures include state expenditure on the social insurance of officials.

6. Pre-war figures from League of Nations, *Armaments Expenditure of the World, 1914*, cited. Post-war figures compiled from League of Nations, *Armaments Year-Book, 1929-30, 1930-31*. Pensions not included in pre-war and post-war figures.

7. Pre-war figures from United States, *Report of Secretary of the Treasury, 1914*, cited. Post-war figures from ibid., 1927-1928, 1929, and 1930 on basis of checks issued. United States expenditure for 1930 from Message of the President of the United States Transmitting the Budget for the Service of the Fiscal Year Ending June 30, 1938. Army and Navy air force expenditures included in above figures.

D: EXPENDITURE  
Percentage of Total National Budgets Expended upon National Defense

	FRANCE (1930-1931 estimates) (in francs)	Per Cent of Total Expenditure
Total expenditure ..... Defense (War, Navy, Air, Colonies) .....	50,398,000,000	
Total expenditure ..... Defense Army .....	10,921,000,000	21.9
Total ..... Army .....	12,079,112,695	
	<b>GERMANY</b> (1930-1931 estimates) (in marks)	
	514,304,000	
	195,897,000	
	<b>799,170,946</b>	
	<b>GREAT BRITAIN</b> (1930-1931 estimates*) (in pounds sterling)	
	710,201,000	5.1
	<b>Total national expenditure</b>	
	Defense .....	
	War pensions .....	
	Service on national debt..	
	<b>Total</b> .....	
	<b>GREAT BRITAIN</b> (in pounds sterling)	
	799,170,946	
	<b>Total national expenditure</b>	
	Defense .....	
	War pensions .....	
	Service on national debt..	
	<b>Total</b> .....	
	<b>UNITED STATES</b> (1930-1931 budget estimates)	
	\$4,437,542,585	
	<b>Total national expenditure..</b>	
	Defense .....	
	War pensions .....	
	Service on national debt	
	<b>Total</b> .....	
	<b>UNITED STATES</b>	
	\$4,437,542,585†	
	<b>Total national expenditure..</b>	
	Defense .....	
	War pensions .....	
	Service on national debt	
	<b>Total</b> .....	
	<b>ITALY</b> (1929-1930, actual expenditure*) (in lire)	
	4,986,580,260	23.6
	<b>Total expenditure (Army, Navy,</b>	
	<b>Air) .....</b>	
	<b>21,062,054,448</b>	

1. France, Finances Ministère, *Projet de Loi Portant Fixation du Budget, 1931-1932* (Paris, 1930), Vol. I, p. LXV-LXVII.  
2. Germany, Reichshaushaltssplan, *Budget für das Rechnungsjahr, 1931*, Vol. I, p. 30-49.  
3. Great Britain, *Civil Estimates, 1930-1931*.  
4. United States, *Message of the President Transmitting the Budget for the Fiscal Year 1931-1932*, p. VI (Washington, 1930). Deducting Post Office expenditures offset by postal receipts, the total expenditure is reduced to \$3,711,498,488, the amount actually payable by the Treasury. Defense expenditure represents 19.6 per cent of this figure.  
5. Italy, Ministero Della Finanze, *Summarized Treasury Statement, Situation of the National Budget*, June 30, 1930, Rome 1930.

D: EXPENDITURE  
Percentage of Total Expenditures Attributable to War

	FRANCE (1930-1931 estimates) (in francs)	Per Cent of Total Expenditure
Total national expenditure .....	50,398,000,000	
Defense .....	10,921,000,000	21.9
Service on national debt and war pensions	23,856,000,000	47.8
<b>Total</b> .....	<b>34,777,000,000</b>	<b>69.7</b>
	<b>UNITED STATES</b>	
	\$727,745,593	
	836,244,020	
	1,043,998,200	
	<b>\$2,607,987,813</b>	
	<b>Total</b> .....	<b>58.8</b>

the amount actually payable by the Treasury. Defense, pensions and debt service account for 70.1 per cent of this figure.